

Assistant Commissioner for Patents  
Washington, D.C. 20231

AMENDMENT UNDER 37 C.F.R. 1.111

Sir:

Applicants respectfully request a two-month extension of time to respond to the Office Action dated July 18, 2002. Please enter the amendments and remarks provided below.

IN THE CLAIMS:

Amend claims 1, 2, 10 and 16 to read as follows:

1. (Amended) A method for operating an alternator of a motor vehicle, the alternator having a controllable output, the method comprising:

monitoring an amount of stored electrical energy available to operate the vehicle;

estimating a vehicle electrical load;

generating an alternator setpoint control signal based at least in part on the amount of electrical energy available to the vehicle and the estimated electrical load of the vehicle; and

using the setpoint control signal to control the alternator output so as to track the electrical load requirements of the vehicle and minimize the amount of excess electrical energy generated by the alternator.

2. (Amended) The method according to claim 1, further comprising the steps of:

monitoring operation of vehicle electrical components; and

estimating the vehicle electrical load based on the monitored operation of the vehicle components.

10. (Amended) A method for operating an alternator of a motor vehicle having a battery coupled to the alternator for

storing electrical energy, the alternator having a controllable output, the method comprising:

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- monitoring a battery state of charge;
  - monitoring operation of vehicle electrical components;
  - estimating a vehicle electrical load based on the operation of the vehicle components;
  - generating an alternator setpoint control signal based at least in part on the battery state of charge and the estimated vehicle electrical load; and
  - using the setpoint control signal to control the alternator output so as to track the electrical load requirements of the vehicle and minimize the amount of excess electrical energy generated by the alternator.
- Ins. C2

13. (Amended) A system for operating an alternator of a motor vehicle, the alternator having a controllable output, the system comprising:

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- a first monitor for indicating an amount of stored electrical energy available to operate the vehicle;
  - a second monitor for indicating operation of vehicle electrical components; and
  - a controller coupled to the first and second monitors for estimating a vehicle electrical load based on operation of vehicle electrical components, generating an alternator setpoint control signal based at least in part on the indicated amount of stored electrical energy and the estimated vehicle electrical load, and using the setpoint control signal to control the alternator output so as to track the electrical load requirements of the vehicle and minimize the amount of excess electrical energy generated by the alternator.
- Ins. C3